

## **Summary of Major Changes**

### **For conversion from ODOT 2002 CONSTRUCTION AND MATERIAL SPECIFICATION to THE 2002 CITY SUPPLEMENT**

#### **100 GENERAL PROVISIONS**

- 102.01 Prequalification of Bidders.** Unless otherwise stated, Bidders do not have to be pre-qualified.
- 102.06 Preparation of Bids.** Bidders must bid labor and material for bid items.
- 102.09 Proposal Guaranty.** Bid bond is required for all bids.
- 103.05 Requirement of Contract Bond (Performance Surety).** Bond is required through the correction and repair period.
- 103.06 Execution of Contract.** Return executed contract within 10 days.
- 103.07 Failure to Execute Contract.** Previous request to withdraw a bid may be grounds not to award a future contract.
- 104.02 Revisions to the Contract:**
- B. Differing Site Conditions.** The City will grant no adjustment for rock within two meters (6 ft) of the surface before excavation.
- D. Significant Change in Character of Work.** The City will not pay price adjustment for increase and decrease of estimated quantities.
- 104.03 Rights in and Use of Materials Found on the Work.** The City retains ownership of salvage materials.
- 105.021 Record Drawings.** Contractor is to keep a Record Set of drawings to be submitted before final payment.
- 105.05 Cooperation by the Contractor.** The City will provide five sets of plans and specifications to the Contractor at no cost.
- 105.071 Working Near Street Trees.** When working within 15 feet of a tree, obtain a permit from the City's Urban Forestry Section and follow the procedures of this section.
- 105.072 Loop Detectors.** Special attention should be given to loop detectors at all intersections.

**105.08 Cooperation Between Contractors.** If the bid documents call for assignment of Subcontractors, the Contractor shall execute pertinent agreements needed to consummate assignments.

**105.15.1 Failure to Maintain Roadway.** The City has the right to correct any hazardous condition and back charge the Contractor.

**105.16 Borrow and Waste Areas.** Unless otherwise provided in the Contract, costs for analysis and disposal of any contaminated materials encountered during the work shall be borne by the City.

**105.19 Construction Stakes, Lines and Grade.** Unless otherwise stated, the City Surveyor will set all line, grade, slope and location stakes necessary for the proper prosecution of the work. Traffic control for layout is to be provided by the Contractor. Layout will be done during normal working hours.

**106.02 Samples, Tests, Cited Specifications.** The Contractor has the obligation to demonstrate material conformance to the requirements of the work. Submit Certification of Material Compliance for any material before incorporation in the work.

**106.08 Steel and Iron Products Made in United States.** This section only applies to contracts partially or wholly funded with State and/or Federal money.

**107.02 Permits, Licenses and Taxes.** If the Contractor desires to use water from fire hydrants during construction, the Contractor shall obtain a permit from Greater Cincinnati Water Works (GCWW).

All Contractors working within the Right-of-Way must apply for and secure a permit from the Cincinnati Department of Transportation and Engineering (DOT&E) before starting work.

**107.04 Restoration of Surfaces Opened by Permit.** The Contractor shall perform restoration of any street cut in accordance with the contract provisions and the "Street Restoration Book."

**107.041 Restoration of Surfaces Opened for Water Main Work.** Added entire section for GCWW contracts.

**107.07 Public Convenience and Safety.** Added section **107.071 Site Safety Plan.** File with the Engineer prior to start of work a Site Safety Plan.

**107.09 Use of Explosives.** The Director of DOT&E will not permit blasting or the use of explosives on the work without written permission from the City Manager.

**107.12 Responsibility for Damage Claims, and Liability Insurance.** Furnish two unaltered copies of the official certificate of the Industrial Commission of Ohio indicating that the Contractor has paid the premiums required under the Ohio Workers Compensation Act.

The City of Cincinnati shall be named as an additional insured on general liability insurance. The City's Purchasing Agent may set maximum reasonable deductible limits on insurance policies.

**107.22 Notification to Affected Parties.** The Contractor is responsible to notify adjacent, abutting, nearby and affected persons, businesses and individuals of upcoming construction activities. Notify residents and businesses at least 24 hours in advance of when their driveways will be blocked during construction.

**108.01 Subletting of Contract.** Within two weeks after the award of a Contract, send to the Engineer a complete list of any Subcontractors the plans to use to complete the work, along with completed Subcontractor Approval Form PURCH 208. Include proposed contract amounts and calculations showing that the Contractor plans on doing at least 50 percent of the work with his own forces. Submit for approval any deviations and reason for the change that may occur during the term of the contract

**108.02 Pre-construction Conference, Partnering, and Progress Schedule.** Unless otherwise stated there will be no partnering.

**108.10 Payroll Records.** Each month during the contract period the Contractor shall submit a form **PURCH 257**, Monthly Employment Utilization Report.

**108.11 Post Construction Meeting.** After final inspection the Engineer may conduct a meeting to critique the contract documents (i.e., plans, proposal).

**109.051 Contract Contingency.** Added contract contingency as a pay item.

**109.09 Estimates.** The City will withhold retainage as specified in this section:

Payment requests shall be made on Form 37, Claim Voucher Invoice. Form No. 97S Affidavit of General or Mechanical Branch Contractor, must be submitted with every request for partial payment.

Per City Ordinance No. 291 – 2002 all Contractors shall promptly render payment to all Subcontractors. Provide with each invoice to the City on each contract, beginning with the second invoice, proof of payment to Subcontractors, in form and content approved by the Director of Finance, evidencing that all Subcontractors have been duly paid out of the proceeds of the Contractor's payments from the City under the contract.

**109.10 Payment for Delivered Materials.** Subsequent payments for construction work, up to the value of the stored material allowance, will not be processed until such time that the Contractor submits an affidavit from the Supplier indicating payment received.

**109.12 Final Acceptance and Termination of Contract Responsibility.** Delete ODOT and the City will adhere to the close out procedures as stated in this section.

- A. Substantial completion relieves Contractor from liquidated damages.
- B. Contractor has 30 days to complete all punch list work after substantial completion or face \$100/day damages.
- C. The Engineer needs to declare a Final Completion date, which starts the one-year correction and repair period and ends the Contractor's maintenance responsibility.
- D. All contracts have a one-year correction and repair period. Contractor is responsible to maintain a bond during this period.
- E. Contractor has 30 days to accept or reject final quantities upon notification from the Engineer.
- F. Contractor has 60 days from Final Completion to submit all closeout documents required all apply for final payment or face \$100/day damages.

## **200 EARTHWORK**

**201 Clearing and Grubbing.** Added inspection by Tree Professional to determine safety and potential longevity of trees to remain.

Added pruning of branches and trees over roadway standards in 666.03 and 666.04.

**202 Removal of Structures and Obstructions.** Added to General Construction Requirements removal and storage of street signs and direction to abandon sewers and drainage structures in accordance with 202.041.

Added to Pipe Removal that unit price includes pipe removal of all existing house connections. Also added that pipe removal is incidental to installation of new conduit in the same approximate alignment as the existing pipe.

Added sealing and plugging details to Abandoned Sewers and Drainage Structures. Give Contractor the option to remove rather than sealing and filling abandoned sewers.

Added Removing Tree Guards.

Added Removing Tree Grate From Existing Tree Grate Frame.

Added language to Manhole, Catch Basin and Inlet Removed directing Contractor to store for reuse or deliver to the City.

Added language to Manhole, Catch Basin and Inlet Abandoned directing the Contractor to store for reuse or deliver to the City.

- 203 Roadway Excavation and Embankment.** Added language to include excavation within streets to remove flexible base, repair shoulders, etc., as unclassified excavation.

Added to General, Embankment Construction Methods: 1) Language to clarify that embankment includes filing of eroded areas adjacent to curbs and street. 2) Directions to break up pavement before constructing embankment. 3) Directions to replace damaged or displaced sections of embankment.

Removed section on Spreading and Compaction of Shale. Replaced this section with two sections, Spreading and Compaction of Soft Shale, and Spreading and Compaction of Shale and Thinly Layered Limestone. The replacement specifications follow the Indiana Department of Highways Specifications developed for conditions similar to southwestern Ohio.

- 210 Special Excavation.** Added special excavation for excavation not included in 203 or 503, such as test excavations or removing unsuitable material.
- 211 Special Fill Material.** Added special material for furnishing, placing, and compacting granular material that meets the requirements of 703.11.

### **250 PAVMENT REPAIRS**

- 251 Partial Depth Pavement Repair.** Refer to City Standard Drawings Accession No. 21513 and 21514 pertaining to this item.
- 252 Full Depth Rigid Pavement Removal and Flexible Replacement.** Refer to City Standard Drawing Accession No. 21512 pertaining to this item. Revised method of removing pavement in 252.02. Differing method of compacting the final lift of asphalt in 252.04. Full depth pavement sawing **included** in the contract price for this item in 252.05.
- 253 Pavement Repair.** Details about pavement repairs and replacement material in the Special Provisions, not on the plans. Section 253.03 revised.
- 255 Full Depth Rigid Pavement Removal and Rigid Replacement.** Revised method of pavement removal in 255.03. In 255.09 and 255.10, Full Depth Pavement Sawing included in the contract price for this item.

### **300 BASES**

- 304 Aggregate Base.** Use of crushed recycled concrete permitted at the discretion of the Engineer.
- 305 Portland Cement Concrete Base.** In 305.02, refer to City Standard Drawing Accession No. 21505 for typical pavement joint layout at intersections.
- 309 Additional Portland Cement Concrete Base.** For conditions where concrete base is installed to a depth differing from that shown on the Contract Plans.

### **400 FLEXIBLE PAVEMENT**

- 401 Asphalt Concrete Pavements - General.** The 703.05 Coarse Aggregate must be 100 percent crushed. Reclaimed Asphalt Concrete Pavement (RAP) need not be limited to ODOT or Ohio Turnpike Commission projects. Do not use RAP contained within the bottom foot of a RAP stockpile for any asphalt concrete mixes. Include payment for 407 Tack Coat in the respective 446 or 448 intermediate or surface course items.
- 407 Tack Coat.** In 407.06, the application rate is 0.10 gallons per square yard or as directed by the Engineer. In 407.09, the payment for Tack Coat is included in the contract price for the pertinent 446 or 448 intermediate or surface course items.
- 409 Sawing and Sealing Asphalt Concrete Pavement Joints.** In 409.03, dry cutting is not permitted. Only wet cutting is allowed. Sawing slurry must be cleaned from the pavement by the end of the workday and before opening the road to traffic.

### **450 RIGID PAVEMENT**

- 451 Reinforced Portland Cement Concrete Pavement.** In 451.03, straight forms 5 feet (2m) long permitted on curves where the radius is between 100 feet (30m) and 200 feet (60m). Revised concrete testing requirements in 451.06 along with concrete placement revisions. Revised reinforcement map lapping requirements in 451.07. In 451.08 (D), construct contraction joints approximately 15 feet (5m) apart unless otherwise directed by the Engineer. Delete impressing station numbers in fresh concrete in 451.09. Additional requirements to remove forms in 451.11.

- 499 Concrete - General.** See requirements for Mobile Volumetric Batching and Continuous Mixing Plants in 499.06. Delete the reference to testing beams in 499.09.

## **500 STRUCTURES**

- 501.04 Shop Drawings.** The City requires five sets of shop drawings and a 14-day review period. No fabrication begins until all of the City's comments have been resolved.
- 509.11 Reinforcing Steel – Basis of Payment.** The City retains the option of including the cost of the reinforcing steel with the cost of the concrete item.
- 511.06 Concrete Test Specimens.** The City requires at least four concrete test cylinders for any concrete structure.
- 511.17 Curing and Loading.** The City modifies the curing method for Superstructure Concrete and for Class HP concrete deck superstructure concrete.
- 519.06 Placing, Finishing and Curing of Concrete.** The City requires notification at least 24 hours before any repaired area is sounded so that the Engineer and/or the Inspector can be present.
- 520.11 Inspection and Testing.** The City requires notification at least 24 hours before any repaired area is sounded so that the Engineer and/or the Inspector can be present.
- 524.10 Concrete for Drilled Shafts.** The City allows Class C concrete with a maximum water-cement ratio of 0.50.

## **600 INCIDENTALS**

- 601.04 Riprap.** Take special care to place riprap pieces tightly, place by hand if necessary.
- 602 Masonry.** Excavate to solid ground. Refer to Cincinnati standard drawings.
- 603.01 Pipe Culverts Sewers and Drains.** Specifies City pipe types, additional to ODOT. Maintain sewerage flow when repairing sewer under MSD direction.
- 603.012 Type H Conduit.** Use City type H conduit when extending inlet connections or replacing or building new inlet connections.

**603.013 Building Sewers.** Property owner pays for building sewer from an existing or proposed sewer to a point beyond the limits of construction. Get the agreement of the property owner to construct building sewer. Maintain records of all branches.

**603.014 T and Y Branches.** Keep location records of all T and Y branches, and install according to City specifications.

**603.017 Backfilling Plastic Pipe.** Backfill conforming to City specifications.

**603.018 Backfill for Plastic Pipe.** Refer to this specification when selecting appropriate backfill for plastic pipe.

**603.02 Materials.** Refer to this Item for pipe material selection and substitutions.

**603.029 Video Taping of Installed Sewers.** Specifies when and how sewers must be video taped after installation. Documentation required must conform to Metropolitan Sewer District standards.

**603.03 Excavation (for pipe).** Specifies methods of excavation, refill and disposal of soil for pipe excavations. Also, treatment of **Sheeting and Bracing** practices is specified.

**603.031 Tunneling.** Use this specification in addition to Item 524 when installing sewer pipe.

**603.04 Bedding.** Delete ODOT and maintain Class A and Class B bedding methods and material, according to Standard Drawing Number 49032, for pipe construction.

**603.05 Laying Conduit.** Supplements ODOT when laying various types of pipe.

**603.06 Joining Conduit.** Supplements ODOT for City type pipe joints and methods.

**603.08 Backfilling.** Specifies material and methods for backfilling City pipe and when to use CLSM.

Provides requirements when using jetting as a compaction method.

**604.04 Excavation and Backfill.** Apply for a permit from the City Engineer for all work. Leave the area in as good or better condition as before construction. Use CLSM under all street or driveways within the right-of-way.

**604.056 Precast Solid Concrete Block.** This material may not be used in the construction of manholes and junction chambers.



- 608 Walks, Curb Ramps and Steps.** Significant changes occur in curb ramp design and construction to conform to amended ADA guidelines including; new standard drawings are in use, detectable warning devices are required on new curb ramps, design of ramps has changed to conform to various locations and quantities paid for have changed.
- 609 Curbing.** Provides instruction for use of City type curbs, materials, construction methods and restoration.
- 613 Low Strength Mortar Backfill.** Use the current edition of **HAMCIN: CLSM – CDF** from the City Engineers office.
- 614 Maintaining Traffic.** Replaces ODOT for maintaining traffic within the City. Requires maintenance of traffic plan be submitted and covers barricades, signals, barrels, lighting, pedestrian safety and pavement markings.
- 627 Driveways.** Specifies driveway type and method of measurement for concrete and Asphalt with concrete base driveways.
- 628 Sawing Concrete.** Damage for concrete sawed but not required in the plans, must be repaired at the Contractor's expense.
- 629 Curbs Reset.** Do not reset curbs unless approved by the Engineer. Specifies construction method to reuse old curb.
- 635 Cutting and Trimming Old Granite Curb.** Salvage old granite curb where possible with approval from the Engineer. Dress the ends and spalled areas as noted.
- 636 Bicycle Rack Type A.** Provides specification for the construction of permanent bicycle racks within the right-of-way, acceptable to the City.
- 637 Sheeting and Bracing ordered Left in Place.** Occasionally it is prudent to leave sheeting and or bracing left in place for safety reasons. This may only be done by order of the Engineer and will be paid for under this Item.

## **640 PAVEMENT MARKING**

- 641 Pavement Marking General.** Streets that are ground to be repaved must have temporary pavement markings to direct traffic. These will be paid for under Item 614.

## **650 ROADSIDES**

- 660 Sodding.** Add wordage to this ODOT Item.
- 663 Ornamental Light Attachments in Trees.** This is a new Item associated with streetscapes and ornamental decorative lighting.
- 664 Structural Soil Mix.** This is a new Item for use in tree planting in sidewalk areas.
- 665 Planting Salvaged Plants.** This is a new Item to be utilized when replanting material on a job site.
- 666 Pruning Existing Trees.** Supplement ODOT when pruning street trees.
- 667 Large Trees Moved and Reset.** Prune, wrap and fertilize large trees that have been moved in accordance with this specification.
- 668 Seeding and Jute Matting.** Supplement ODOT with this specification when protective matting is required.
- 670 Erosion Protection.** Supplement ODOT when using materials, constructing and submitting for payment. An erosion protection plan must be approved and in place prior to start of construction.

## **700 MATERIAL DETAILS**

- 700** Includes additional sampling requirements for concrete pavement/structures
- 703.01 General.** Replaces Clay Lumps Test with AASHTO T112 test.
- 703.05 Aggregate for Asphalt Concrete (Intermediate and Surface Courses), Prime Coat (408), Chip Coat (422), and Microsurfacing (421).** Requires 100% crushed carbonate stone, 100% crushed air-cooled slag, or 100% crushed washed gravel.
- 703.20 Bank Run Gravel.** Includes "Bank Run Gravel" Specification.
- 706.02 Reinforced Concrete Circular Pipe.** Replaces various testing and marking procedures and modifies certain tables to included additional pipe sizes.
- 706.04 Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe.** Replaces various testing procedures.

- 707.01 Metallic Coated Corrugated Steel Conduits and Underdrains.** Specifies that aluminum coated corrugated steel conduits and underdrains conform to AASHTO M36-801 with additions.
- 707.02 Metallic Coated Corrugated Steel Conduits [1-inch (25 mm) Corrugations].** Specifies that aluminum coated corrugated steel conduits and underdrains conform to AASHTO M36-801 with additions.
- 707.18 Cast Iron Pipe.** Specifies that cast iron pipe, fittings and joints for sewers conform to AWWA Specifications C-102, C-106, C-108, C-110 and C-111.
- 707.20 Ductile Iron Pipe.** Specifies that ductile iron pipe, fittings and joints for sewers conforms to AWWA Specification C-151.
- 707.41 Polyvinyl Chloride Plastic Pipe.** Specifies that ASTM D-3212 joints, flexible elastomeric seals, or solvent welded joints be used with ASTM D-2855 for PVC specified pipe and specifies that this material can only be used if cover is 35' (10m) or less.
- 707.52 ABS Sewer Pipe.** Specifies that this material can only be used if cover is 35' (10m) or less.

## **1100 WATER MAIN WORK**

1. Eliminated Passive Voice.
2. Removal of “the Contractor shall”..... everything is in imperative case. Consistent with ODOT CMS these specifications are written to the Bidder before award of the Contract and to the Contractor after award to the Contract. The sentences that direct the Contractor to perform Work are written as commands.
3. Changed CWW to GCWW.
4. Contractor supplies all material on projects except on some Water Supply Lines (Private developers) where GCWW participates. GCWW furnishes all butterfly valves. CWW furnished fire hydrants for public projects in the City of Cincinnati.
5. On all projects, including Water Supply Lines, Contractor supplies ferrules, including those for air cocks and sampling points.
6. Maintain sidewalks at all times; no storage of pipe on walks (No storage of any materials will be permitted within the public Right of Way, including sidewalks, unless previously approved by GCWW or as indicated on the approved Plans.)

7. Limited amount of OH&P to 30% . ODOT allows 38%. GCWW understands that differing site conditions sometimes results in extra work/change orders to the project. Change Orders on GCWW contracts will be done in strict accordance with Item 109.05 C of the State of Ohio Department of Transportation Construction and Material Specifications dated January 1, 2002 or most recent edition and as modified in this City of Cincinnati Supplement. GCWW limits the mark up on wages and fringe benefits as described in 109.05 C. 2. "Labor" to 30%. It is expressly understood that regardless of the nature of the claim, or change in scope of work, the Contractor is not entitled to compensation for loss of anticipated profit or production.
8. Required Contractor to locate or pot hole all utilities within alignment of proposed main a minimum of 50 feet ahead of pipe laying. If not done, no change orders regardless of incident. Test holes must be dug, or trench excavated a minimum of 50 feet (15.2 m) in advance of pipe laying, to assure proper clearance between the water pipe and any utility crossing, or underground structure. All utilities and structures shall be suitably braced and supported. The Contractor shall understand any obstructions encountered in installation of the main, due to the failure of having 50 feet (15.2m) of trench excavated ahead of laying operations, may require removal and relaying of the pipe at the at the Contractors expense. The GCWW will not accept a claim for different utility conditions encountered when test holes are not performed as required.
9. Contractor responsible for scheduling and delivery and unloading of all pipe material, including concrete pipe. When the Supplement was last updated, GCWW still had a separate contract for concrete pipe. Recently a Contractor submitted a claim to GCWW for delays in starting a project until GCWW approved the laying schedule. Now the Contractor is responsible for the scheduling and language is included pertaining to laying schedules.
10. We have paid several change orders for abandoned utilities encountered in the trench. The Contractor has to take time to identify the utility and determine if abandoned. When crossing the trench we feel it is not abnormal for the Contractor to expect this occurrence. So the following note was added: "It is the nature of construction that unmarked utilities or utilities not shown on the plans may be encountered within the excavation for the proposed work. The Contractor is responsible to identify and remove any abandoned utilities encountered that cross the excavation. No extra payment will be made to the Contractor for the identification and removal of the abandoned utility. All costs shall be included in the Contractor's unit price bid for the appropriate Item 1101-Furnishing & Laying Pipe and Fittings." If abandoned utilities run the length of the trench, we realize this would require removal. Such would be paid as a normal change order.
11. Disturbed Pavement and Trench; Street pavement or sidewalk should not be disturbed for a distance of more than 200 Feet (61.0m) ahead of the last laid pipe. Previously was 400 feet. Backfill shall be completed within 50 feet (15.2 m) of the last laid pipe. Previously was 100 feet. Temporary or permanent surface restoration must be

installed within a distance of 200 feet (61.0 m) of the laid pipe, including those areas where main installations occur within a closed lane or closed street condition. Previously was 400 feet. Roadway plates may be used as a temporary measure for a period not to exceed 24 hours without the approval of the G.C.W.W. We have had many complaints on projects recently about noisy roadway plates left on for an extended period of time.

12. We previously had only Sheeting and Bracing. In recent years trench boxes are more common. The following language was added: The Contractor shall furnish shielding as may be required to securely support the sides and ends of the excavations, and to prevent injury to persons and property or to the structure being built. Voids appearing outside of shielding shall be immediately and completely filled with suitable material in a satisfactory manner. Shielding shall not be removed until sufficient backfill has been placed to provide ample support to the sides of the excavation.
13. Protect main and require polypigging when ground water gets into the main due to Contractor's error. When foreign material and/or ground water enters the newly laid pipe, prior to filling and testing, the entire pipe line shall be poly-pigged to remove all possible contaminants at the Contractor's expense. Upon successful completion of the cleaning operation, the pipe will be rechlorinated by the GCWW at the Contractor's expense.
14. Hydrostatic Test now includes Contractor requirements for flushing. HtH pills used on all mains 20 inches and smaller. Contractor fills, tests, and flushes on all mains 20" and smaller. Valveroom to sample and turn on mains. GCWW to do tests on mains 24" and larger.
15. When completing a joint utilizing a 12 inch [0.305m] restrained joint gasket, the Contractor may use a backhoe where needed. The Contractor should exercise care as to not damage the gasket in this operation.
16. All exposed steel pipe, couplings, flanges, or bolts, either buried or in chambers, shall be coated with Sherwin-Williams High solids Catalyzed Epoxy Paint (2 part mix NSF 61 approved). All coating material must be applied in accordance with manufacturer's recommendations.
17. 1101.066 Joining HDPE (High Density Polyethylene) Pipe. All manufacturing and assembly of HDPE shall be in accordance with the related GCWW Standard Drawings and the HDPE Water Main Specifications.
18. Backfill Gravel shall conform to 703.11 except that no foundry sand will be allowed.
19. Controlled Density Fill (CDF)/Controlled Low Strength Mortar (CLSM) (HAMCIN: CLSM-CDF) is an acceptable backfill material. The CDF/CLSM shall meet the requirements of Specification 613. Prior to placement of CDF/CLSM a compacted 12" [0.305m] bedding of granular material above all utilities within the excavation is

required. In addition to 613 or HAMCIN: CLSM-CDF, whichever is applicable, the approved mixes must meet GCWW material specifications.

20. Added to Tunnel Liners and Casings: The Contractor is responsible for the bore pit excavations and the necessary support and maintenance of all utilities within the excavations.
21. 1112 Each Furnishing and Installing Flush Hydrants (various sizes).
22. Revised Exploratory Excavation: This item shall not include excavations within the limits of the proposed trench as defined in 1101.04 and 1101.05. Test holes are required on all utilities within 50 feet of the last laid pipe. Test holes within the alignment of the proposed trench are included in the Contractor's unit bid for Item 1101. Locations to be explored will vary from areas within the roadway to areas outside of the roadway. The Contractor needs to consider this in preparation of the unit bid.
23. Changing Pipe Sewers. The Contractor shall furnish all necessary labor, material, tools, and equipment required to change the grade or alignment of pipe sewers and laterals of various sizes, allowing installation of water mains and appurtenances as shown on the Plans, or as directed by the GCWW Inspector. GCWW has made every effort to depict the pipe sewers and lateral information on the Plans. If the Contractor encounters a pipe sewer or lateral in the excavation that was not shown on the Plans and it requires a change of grade or alignment due to the installation of the water main, the Contractor will be compensated for the work under this bid item. This work shall include all necessary excavation, backfill, and restoration.
24. Added 1137. ITEM 1137 - Furnishing and Installing or Relocating Existing Meter Settings (Domestic and/or Fire), Backflow Preventer, and Appurtenances and Construct Pit.

## **Series 1300**

*Not completed at the time of printing*

